

REMARKS

Applicants would like to thank the examiner for careful consideration of the pending application. A certified translation of the priority document will be forthcoming.

Claims 10-16 are pending in this application. Claims 1-9 have been cancelled. Claims 10 and 11 have been amended. Support for all amendments can be found in the specification and claims as originally filed. No new matter has been added.

Rejections of Claims 1-9

Claims 1-9 stand rejected under 35 USC 101 as being inoperable.

Claims 1-9 stand rejected under 35 USC 112, first paragraph.

Claim 1 stands rejected under 35 USC 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention.

Claims 5 and 6 stand rejected under 35 USC 112, first paragraph for failing to comply with the enablement requirement.

Claim 1 stands rejected under 35 USC 112, first paragraph for failing to comply with the enablement requirement.

Claims 1-9 stand rejected under 35 USC 102(b) as being anticipated by Dehli et al. "Enantio- and chemoselective bioreduction of β -keto nitriles by fungus *Curvularia lunata*", Tetrahedron, vol. 11, pages 3693-3700 (hereinafter referred to as "Dehli").

Claims 1-9 stand rejected under 35 USC 103(a) as being unpatentable over Dehli in view of Wermuth, "The Practice of Medicinal Chemistry", pages 205-214.

Claims 1-9 stand rejected under 35 USC 103(a) as being unpatentable over CABON^{ab} et al. "The Microbial Reduction of 2-chloro-3-oxoesters", Tetrahedron, vol. 6, pages 2199-2210 (hereinafter referred to as "CABON") in view of Dehli.

Claims 1-9 have been cancelled rendering the above rejections of Claims 1-9 moot. Withdrawal of these rejections is respectfully requested.

Rejections under 35 USC 112First Paragraph

Independent Claim 10 stands rejected under 35 USC 112, first paragraph, for failing to comply with the enablement requirement.

35 USC 112, first paragraph essentially requires that the specification includes the following: a written description of the invention, the manner and process of making and using the invention (the enablement requirement) and the best mode contemplated by the inventor of carrying out his invention. "The test of enablement is whether one reasonably skilled in the art could make or use the invention from the disclosures in the patent coupled with information known in the art without undue experimentation." *In re Wands*, 858 F.2d at 737, 8 USPQ2d at 1404 (Fed. Cir. 1988). See also *United States v. Telectronics, Inc.*, 857 F.2d 778, 785, 8 USPQ2d 1217, 1223 (Fed. Cir. 1988). Accordingly, the Examiner has the burden to establish a reasonable basis to question the enablement provided for the claimed invention.

The Examiner suggests that independent Claim 10 contains subject matter that is not described in the specification in such a way as to enable one skilled in the art to make and/or use the invention. Applicants have amended independent claim 10 to clarify the term "W" in the specification as originally filed. Reconsideration of the Examiner's rejection is respectfully requested.

The Examiner's rejection has been attended to.

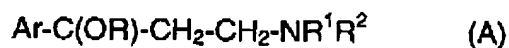
Rejections under 35 USC 103

Claims 10-16 stand rejected under 35 USC 103(a) as being unpatentable over WO 2004/024708 to Houson et al. (hereinafter "Houson") in view of Wermuth.

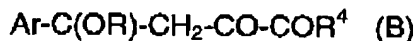
It is well settled that to establish a *prima facie* case of obviousness, the USPTO must satisfy all of the following requirements. First, the prior art relied upon, coupled with the knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or to combine references. *In re Fine*, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Second, the proposed modification must have had a reasonable expectation of success, as determined from the vantage point of one of ordinary skill in

the art at the time the invention was made. *Amgen v. Chugai Pharmaceutical Co.* 18 USPQ 2d 1016, 1023 (Fed Cir, 1991), *cert. denied* 502 U.S. 856 (1991). Third, the prior art reference or combination of references must teach or suggest all of the limitations of the claims. *In re Wilson*, 165 USPQ 494, 496, (CCPA 1970). The Office Action does not establish a *prima facie* case of obviousness.

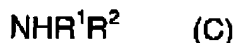
Houson discloses a process for the preparation of compounds that are composed of a 5-member single heteroatom aromatic compound with at least one substituent of the following general formula (A):



where R, R¹ and R² are a variety of moieties by reacting a 5-member single heteroatom aromatic compound with at least one substituent of general formula (B):



where R and R⁴ can be a variety of moieties with a compound of formula (C):



where R¹ and R² are as above to get a compound of formula (D):



where R, R¹ and R² are a variety of moieties, and reducing this compound to get a compound of general formula (A).

Wermuth teaches a variety of isosteres and bioisosteres of aryl and heteroaryl compounds and the differences and similarities of aryl and heteroaryl compounds.

The Examiner suggests that one of ordinary skill in the art would be motivated to modify the process of Houson by replacing the 5-member single heteroatom aromatic compounds of Houson with analogous heteroaryl compounds such as isosteres of aryl and heteroaryl compounds described in Wermuth. The Examiner states that "isosteric heteroaryl material is expected to have analogous operability (Wermuth)".

Applicants respectfully disagree. Houson fails to disclose a process for preparing enantiomer enriched compounds containing heteroaryl compounds in which the aromatic radical has a total of 6-10 ring atoms as recited in amended independent Claim 10. In contrast, the disclosure of Houson is limited to heteroaryl compounds containing 5-member single heteroatom aromatic compounds. Therefore, Houson fails

to teach or suggest all of the limitations of and does not render obvious amended independent Claim 10.

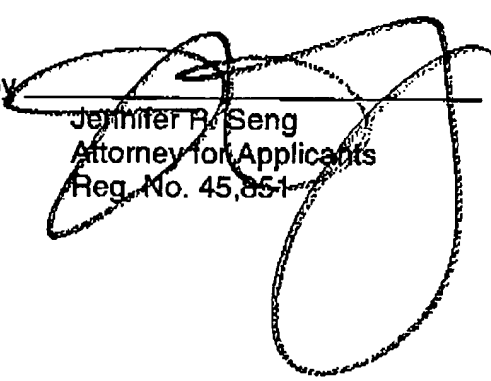
Furthermore, Wermuth fails teach or suggest compounds comparable to those recited in amended independent Claim 10, and therefore, fails to cure the deficiencies of Houson. The Examiner suggests that one of ordinary skill in the art would be motivated to modify the disclosure of Houson by employing the analogous heteroaryl compounds such as the isosteres disclosed in Wermuth. However, the determination of "analogous" heteroaryl compounds is not a trivial task, and the disclosure of Wermuth does not teach or suggest analogous heteroaryl compounds that conform to Formula (I) of amended independent Claim 10. In particular, Wermuth states, "the main criterion for isosterism is that two isosteric molecules must present similar, if not identical, volumes and shapes" (page 206, line 1, last paragraph) and that while isosteric compounds share certain physical properties such as, boiling point, density, viscosity and thermal conductivity, other properties, such as dipolar moment, polarity, polarization, size and shape must be different (page 207, lines 1-2). Applicants submit that differences in properties such as dipolar moment, polarity, polarization, size and shape would greatly affect the operability of the compound. Therefore, Wermuth fails to disclose heteroaryl compounds in which the aromatic radical has from 6-10 ring atoms or analogous compounds to those compounds described in amended independent Claim 10. Accordingly, Wermuth fails to cure the deficiency of Houson.

Therefore, neither Houson nor Wermuth either alone or in combination teach or suggest all of the limitations of and do not render obvious amended independent Claim 10. Reconsideration is respectfully requested.

Applicants believe that pending application is in condition for allowance and respectfully request that the Examiner reconsideration this application is in view of the foregoing amendments and remarks.

Respectfully submitted,

By



Jennifer R. Seng
Attorney for Applicants
Reg. No. 45,851

February 16, 2006

LANXESS Corporation
111 RIDC Park West Drive
Pittsburgh, Pennsylvania 15275-1112
(412) 809-2233
FACSIMILE PHONE NUMBER:
(412) 809-1054

/s/r

S:\Law Shared\SHARED\JRS\PATENTS\7929\2-16-2006 AmendmentCW.doc

CH7929

12